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The Necessary Reform for the Age-free Active Society

Atsushi Seike*

Abstract

This paper explores the possibility of an age-free active society in connection with the reforms of public pension scheme and the employment practice. First, it will examine the inherent influences of pension schemes that could pose obstacles to promoting the employment of older people. Then it will show the negative impact of employment practice particularly mandatory retirement practice. These topics are closely relating to our COE research agenda that aims to the aging workforce.

* Professor, Faculty of Business and Commerce, Keio University

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Atsushi SEIKE
Faculty of Business and Commerce
Keio University

[I] Introduction

An aging population is a common phenomenon among the world's advanced countries. Among the problems posed by population aging, the financing of public pensions is one of the most difficult to cope with. And sooner or later, this will be the case even in the developing countries.

Under the pay-as-you-go system, which is widely employed by most public pension schemes in advanced countries, an increase in the older population who are receiving pension benefits coupled a decrease of in the younger population who are paying pension premiums has of itself worsened the financial situation of public pensions. Of course, a fundamental solution to this problem would be to transform the pension scheme from a pay-as-you-go to a fully funded system. However, a complete transformation to a fully funded system would be very difficult to achieve because of serious obstacles including the so-called double burden problem. With already matured pension schemes in advanced countries, there is a need to improve their financial situation using the existing pay-as-you-go system, though public pension funds can be increased to some extent and can be partially privatized.

One solution under the pay-as-you-go system would be to increase the premium. In Japan, the premium is scheduled to be increased up to 28% in by 2025. However, increasing the premium will result in decreasing the living conditions of working generations while increasing the labor costs of employers.

Another possible solution is to reduce the level of benefits. For example, the Japanese government decided to reduce future benefits when it revised the public pension law in 2000. A drastic reduction in benefits would, however, lower the living standard of

retired people, which would be inconsistent with the basic value in advanced countries of the right to a stable retirement.

It is an undeniable fact that every time population forecasts change, public pension schemes have repeatedly been revised so as to raise premiums and lower benefits, which has led to public skepticism over the veracity of these schemes. More positive solutions are now required to ensure the sustainability of public pension schemes.

One noteworthy scenario for coping with the problem is for older people who are willing and able to work to be allowed to continue working beyond the current retirement age. If by work on, older people continue to be both tax and premium payers, it would significantly improve the financial situation of public pension systems. Such a scheme is underpinned by an "age-free active" scenario, whereby many older people contribute to supporting an aging society.

Based on the tenets of such a concept, Japan, the U.S. and several European countries are now trying to promote the employment of older people. Japan in particular has a great advantage in promoting the employment of older people; that is, their intrinsically high motivation to participate in the labor force(Note 1). Given this high motivation of its older workers, Japan is considered to be the most promising country to develop an age-free active society(Note2).

The purpose of this paper is to explore the possibility of an age-free active society in connection with the reforms of public pension scheme and employment practice. First, I will examine the inherent influences of pension schemes that could pose obstacles to promoting the employment of older people. Then I will show the negative impact of employment practice particularly mandatory retirement practice. Finally, I will offer some policy proposals on the pension reform toward the establishment of an age-free active society.

[II] The Impact of Public Pension on Labor Supply of Older People

Public pension benefits act to reduce the labor supply of pension-eligible older people. Table 1 shows the labor supply elasticity of public pensions among Japanese men aged 60 to 69 in the 1980s and 1990s. The coefficients representing elasticity have

constantly been estimated as negative to a statistically significant degree.

There are two ways that public pension schemes have an effect on reducing the labor supply. One is the income effect. Pension-eligible older people are able to retire upon the pension benefit, which they receive as non-earned income. The other is the effect of the earnings test of public pension schemes. Under it, pension benefits may be reduced or stopped according to the level of earnings of pension-eligible people who continue to work and earn income. Consequently, pension-eligible workers tend to reduce their labor supply to avoid having their benefits reduced or cut. Of these two effects, the income effect has an impact on pension-eligible people irrespective of the type of public pension scheme.

With regard to the earnings test on pension benefits, it poses a problem because it levies a kind of penalty on the work of pension-eligible people. Figure 1 shows the effect of the earnings test on labor supply by observing the earnings distribution of Japanese workers eligible to collect public pension benefits. In the year of the collected data, pension-eligible workers were eligible to receive 80% of their full benefit if their earnings were lower than 95,000 yen.

As seen in the figure, a quarter of the pension-eligible people work just to the point where their monthly earnings are about 95,000 yen, while people who are not eligible for public pensions do not show such an earnings distribution. Many of the pension-eligible workers reduce their labor supply so as by not exceeding the ceiling of the earnings test they can receive 80% of their pension benefit.

In addition to the negative impact of public pension schemes on the labor supply of pension-eligible people, these schemes can also obstruct the full utilization of the skills and abilities of these older workers. That is, they may affect whether the person is able to continue working in the same occupation.

Figure 2 shows the ratio of workers aged 60 to 69 working in the same occupation as they had been at age 55. Because the possibility of working in the same occupation is correlated with mandatory retirement experience and there is high correlation between public pension eligibility and mandatory retirement experience, the observation sample is divided between those with mandatory retirement experience and those without it. In both cases, workers who receive public pension benefits have a statistically lower

possibility of being in the same occupation as they were at age 55; and, therefore, a lower possibility of being in a workplace where their abilities are fully utilized.

[III] The Negative Impact of Mandatory Retirement on the Utilization of Older Human capital

The other serious obstacles for age free active society is the mandatory retirement, which is a widely accepted employment practice in Japan. According to the Survey on Employment Management by the Ministry of Labor, 91.5% of Japanese firms with 30 or more employees practiced mandatory retirement in 2002. By law, the mandatory retirement age should not be below 60 and, again according to the Survey on Employment Management, 90.32% of firms with mandatory retirement set this legal minimum age of 60 as their mandatory retirement age.

Mandatory retirement is the practice that requires workers to leave a firm simply because of age. This practice negatively impacts utilization of an older work force in two aspects.

One is by reducing the motivation of older people to continue working. As is widely known, mandatory retirement does not necessarily mean a complete retirement from the workforce. Many older workers after leaving primary employers through mandatory retirement continue working in secondary job opportunities. However, it is also known that mandatory retirement is one of the most important determinants for complete retirement from the labor market. Many labor economists including myself have estimated the labor supply functions of older people and found that the experience of mandatory retirement significantly reduces the labor force participation possibilities of older people. Table 2 is an extract of estimated parameters that represent the impact of the mandatory retirement experience on labor force participation possibilities. All parameters are estimated by using the Employment Status Survey from the then Japan Ministry of Labor (now Ministry of Welfare and Labor) in each designated years shown in the table.

As seen in the table, the mandatory retirement experience has a significant negative impact on the labor force participation of older people. Though the degree of impact, i.e. the size of parameters, varies depending on the vintage of data and the age group of data samples, the mandatory retirement experience reduces the probability of

labor force participation of men aged 60 to 69 by about 20% *ceteris paribus*. Furthermore, people who completely retire from the labor market after mandatory retirement represent relatively higher human capital.

Figure 3 shows a distribution of wages imputed in the labor supply functions of older people (Note 3).

Here I observe the imputed wages as a comprehensive indicator of human capital in which higher input wages represent higher human capital. The comparison was made between retired men with mandatory retirement experience and working men without mandatory retirement experience.

The input wages of retired men with mandatory retirement experience tend to be higher than those of working men without mandatory retirement experience. This means that the retired men with mandatory retirement experience retain higher human capital than working men without mandatory retirement experience. The result implies that mandatory retirement causes a loss also in human capital from a labor market.

In addition, mandatory retirement obstructs full utilization of the abilities of older workers who continue working beyond the mandatory retirement age. First of all, wages actually paid to workers who have mandatory retirement experience are low relative to their potential abilities. I observed this negative impact of mandatory retirement on full utilization of the human capital of older workers by using the method of switching regressions to differentiate a primary group of higher wage people and a secondary group of lower wage people. If the coefficient for the variable that represents having mandatory retirement experience is significantly negative, mandatory retirement would differentiate the wage functions, and therefore the degree of human capital utilization among older people. And if the coefficient for the variable that represents having mandatory retirement experience is significantly negative in each wage function, mandatory retirement would reduce wages for each group of people. The data set used here is the 1992 Employment Status Survey of the Elderly from the then Ministry of Labor (now Ministry of Welfare and Labor).

Table 3 shows the results. As seen in the table, estimated coefficients for the mandatory retirement experience are negative with high statistical significance. This signifies an important role in differentiating groups of people in terms of wages actually

received. Namely, older workers with mandatory retirement experience are more likely to be assigned to the secondary group in which the wages actually received are lower than in the primary group. And both in the case of the primary and the secondary group, the mandatory retirement experience reduces the level of wages.

There should be no difference in human capital for a worker before and after mandatory retirement, yet the results imply that older workers with mandatory retirement experience tend to be working under circumstances where they cannot display their full potential. Older workers who have potentially higher abilities are often assigned to low wage jobs that require relatively lower abilities.

Another condition affecting older workers and the display of their potential abilities is whether they can continue working in the same kind of occupation or not. Figure 2 shows the proportion of workers aged 60 to 69 working in the same occupation as they were at age 55. Because the possibility of working in the same occupation is correlated with public pension eligibility which is in turn highly correlated with the mandatory retirement experience, the observation sample is separated into those receiving a public pension and those who are not. For comparison between workers with mandatory retirement experience and workers without in the case of those who are not receiving a public pension as shown in the right column of Figure 2, 70% of workers with mandatory retirement experience are working in the same occupation as they were at age 55, while the proportion for workers without mandatory retirement is 85%. The same comparison between workers with mandatory retirement and those without in the case of those receiving a public pension is shown in the left column of Figure 2. Only 45% of workers with mandatory retirement experience are working in the same occupation as they were at age 55, while the proportion for workers without mandatory retirement experience is 60%.

[VI] Policy Proposals

From the points of view discussed, I would like to make policy proposals on the pension reform with regard to establishing an "age-free active society."

Proposal 1: "Reform public pension schemes in such a way that they do not discourage older people from continuing to work."

Because public pensions affect income in a way that induces retirement, it is

important to lift the eligible age so as to avoid their effect of discouraging continued work. In fact, governments in Europe, the U.S. and Japan have already started in this direction, though it will be necessary for them to accelerate the timing of their reforms and to reconsider their final target age for pension eligibility. Of course, in lifting the pension eligible age on one hand, it will, on the other, be necessary to guarantee the right to receive an early but reduced pension for those who want to retire before reaching the eligibility age for full benefits.

To avoid the discouraging effect of the earnings test on the labor supply of pension-eligible people, it will be necessary to revise the earnings test on public pensions substantially. When sustaining the public pension system requires promoting the employment of older people, it is inconsistent for the public pension scheme itself to discourage older people's participation in the labor market. As the U.S. government has done, the earnings test should be eventually eliminated on one hand, as should favorable treatment of pension benefits be abolished in the income tax system on the other hand. Income redistribution from older people with high earnings to others should be done not through the pension system but through the tax system.

Proposal 2: "Reform age-based employment practices in such a way that they do not block the employment of older people"

Current mandatory retirement practice should definitely be changed not to have negative impacts on the employment of older people. To cope with the negative effects of mandatory retirement practices that rely on age, it will eventually become necessary to eliminate these practices; namely, to introduce legislation against age discrimination in employment, such as ADEA in the U.S. Under what circumstances will mandatory retirement be eliminated?

There are of course reasons for employers to maintain mandatory retirement and age limitations in hiring. First of all, as Lazear (1979) clearly described, the seniority-based wage system needs mandatory retirement. The basic argument here is illustrated in Figure 4. This figure shows that, for regular workers on a long-term employment contract such as the Japanese lifetime employment system, a simple wage determination system where wage rates increase with the age of the worker (EH in Figure 4) makes economic sense for both the employers and the workers. A newly employed worker with low marginal productivity gets paid more than the productivity warrants (EF

versus AB), but the situation reverses as the worker's skill level increases (CG versus FG). The situation reverses again as the wages increase with age (GD versus GH). Under this kind of wage system, mandatory retirement (at age R) is a necessity. At age R the worker retires and begins receiving his company pension (IJ), which ends at age K. The parameters of this wage system, the slope of the wage rate, the mandatory retirement age, and the amount and the pay period of pension are set for each type of worker so that the accounting identity equates total worker contribution to the firm to the total wages the worker receives.

This shows not only the reason for the necessity of mandatory retirement but also the reason why employers are reluctant to employ middle-aged and older applicants. It is costly for employers to employ middle-aged and older workers who did not accumulate "deposit" (FCG) in the seniority wage scheme. And employers have incentive to get rid of middle-aged and older workers by making a lump sum payment equal to the difference between productivity and the wage of the worker.

Therefore, to eliminate mandatory retirement practice, substantial reform of the seniority-based wage system will be necessary. We require a shift to a system in which workers' current contributions to the employer and current wages are equated at each point in time (or some approximation to such a system). And in fact the Japanese wage system is now moving in that direction. Figure 5 from the Labor White Paper in 2000 of the Ministry of Labor shows that the age-wage profile of standard male Japanese workers has grown less steep over the past two decades.

Another reason for employers to have mandatory retirement is the seniority-based promotion system. That is the current promotion system by which most, if not all, employees in the same cohort get promoted to higher managerial positions. Under this promotion system, it is necessary for employers to get rid of older workers to vacate positions for their junior workers.

This seniority-based promotion system is also changing gradually due to the changes in economic circumstances and the population structure itself. Figure 6 (a) shows that such promotion practices presume an ever-growing workforce, which is no longer sustainable. The reality now is that many firms are having to carry middle-aged and older workers with quasi-management titles and no work responsibilities, as shown in Figure 6 (b). Such redundant managerial ranks may also end up getting structured out.

Given that the present low-to-no-growth situation is likely to persist for the Japanese economy for some years to come, a more realistic scheme for firms' personnel structure would be to promise no managerial positions as workers get older, as shown in Figure 6 (c).

In this new system, as workers develop specialized skills over time they get treated as specialists in their own fields. And as long as they have such skills and are paid wages just equal to their contributions to the employer, there is no necessity for employers to have mandatory retirement or age limitations on hiring.

Labor market policies should encourage this trend in business to eventually establish an age-free labor market in the aging society. As one measure, an anti-age discrimination act would be worth considering. Announcement of the introduction of such legislation in the future will accelerate reform in business towards an age-free employment system including wages and the promotion system.

[Notes]

(Note1) For example, labor force participation rate in the early 60s was 75% for Japanese men, 40% for Japanese women; 55% for the U.S. men and 39% for the U.S. women; 30% for German men, 12% for German women; and 17% for French men, 16% for French women.

(Note 2) For details, see Seike (2001 a).

(Note 3) We estimated the labor supply function by using the Heckit model.

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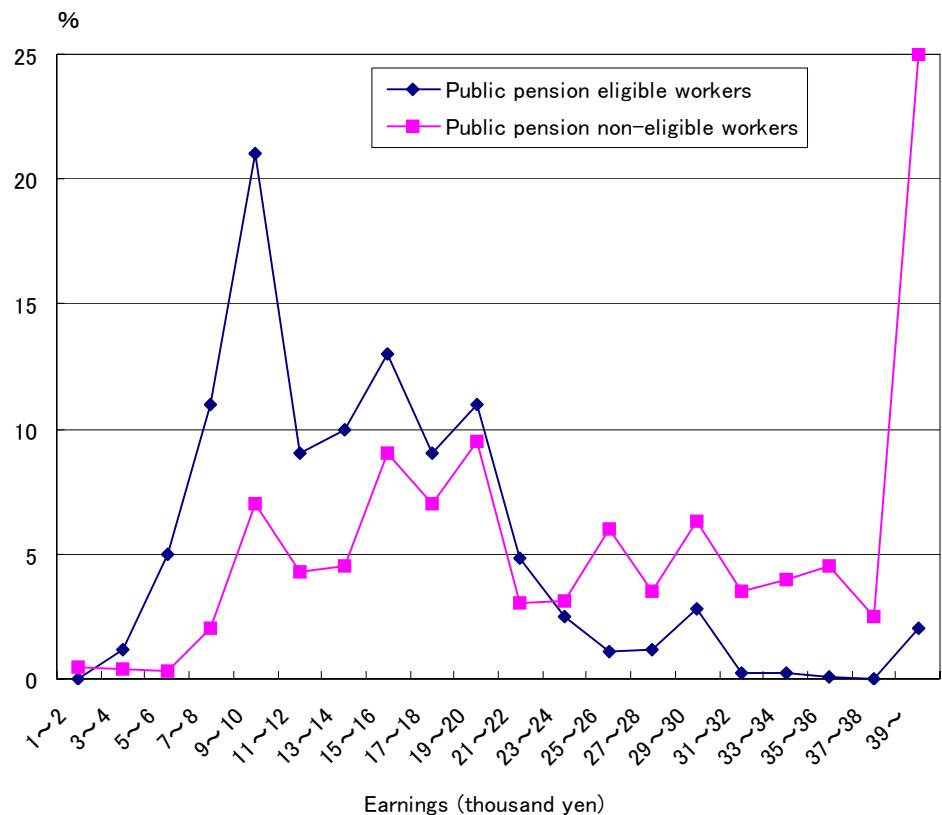
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Table 1. The Negative Effect of Public Pension Benefits on Labor Force Participation
(Japanese Men aged 60-69 in 1980s and 1990s)

year	elasticity
1 9 8 0	-0.258
1 9 8 3	-0.280
1 9 8 8	-0.4348
1 9 9 2	-0.4240
1 9 9 6	-0.4364

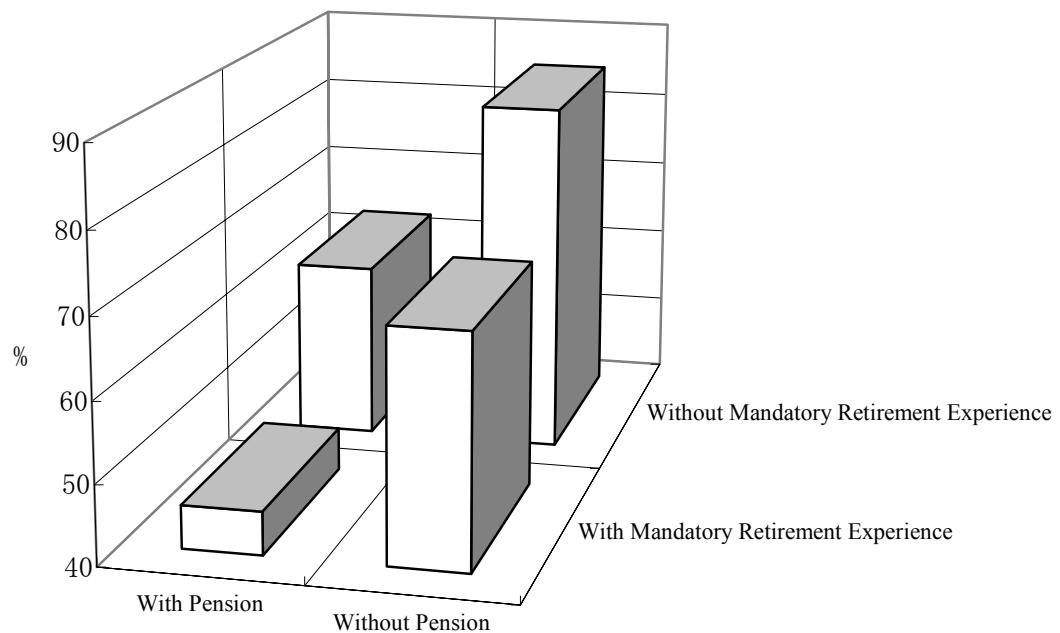
Source: Seike and Suga (2001 b)

Figure 1. Earnings Distribution for Public Pension Eligible Workers and Non-eligible Workers



Source: Seike(1995)

Figure 2. Proportions of Workers by Pension and Mandatory Retirement Experience Who Have the Same Occupations as at the Age 55



Source: Seike and Yamada (1998 b)

Table 2 The Negative Effect of Mandatory Retirement on Labor Force Participation

Research Papers	Observation Year Estimation Sample	Coefficients on the
		Probability of Labor Force Participation
Seike (1993)	1983- men aged 60~69	-0.1774***
Abe (1998)	1983, 1998, 1992- men aged 60~69	-0.227***
Ogawa (1997)	1980, 1983, 1988, 1992- men aged 60~64	-0.1283***
Ogawa (1998)	1983, 1988, 1992- men aged 60~64	-0.0975**
		(Profit Coefficients)
Ohishi (2000)	1996-men aged 60~69	-0.269***
Ohnoko-Nakamura (1999)	1992, 1996- men aged 60~64 with spouse	-0.277***
	men aged 65~69 with spouse	-0.308***

*** Statistically significant at the respective level of 1%.

Table 3 Estimated Results of the Switching Regression Model on Wages Actually Received by Older Workers

Variable	Primary	Secondary	Switch
Constant	6.169***	7.806***	-0.280
AGE	0.003	-0.021***	-0.013
HEALTH	-0.011	-0.141***	-0.371*
FAMILY			-0.027
NOMOGAGE			-0.077
METRO	0.486***	0.240***	-0.120
MANDRET	-0.265**	-0.104***	-0.500***
PENSION			-0.024***
REGULAR55	0.488***	0.064**	0.134
GOV55	-0.131	-0.011	-0.098
LARGE55	0.428***	0.123***	0.237*
SMALL55	-0.627***	-0.053**	-0.334***
MGR55	0.131	0.351***	1.156***
PRO55	-0.310	0.251***	0.978***
OTHER55	-0.725***	0.060*	0.545***
SERVE55	-0.982***	0.012	-0.136
SAMEJOB55	-0.065	0.264***	
SAMEFIRM55	0.549***	0.142***	
Covariance with Switching Error	1.118	-0.059	(Normalized to 1)
Log likelihood			-3160.73
Sample Size			3308

(Note)

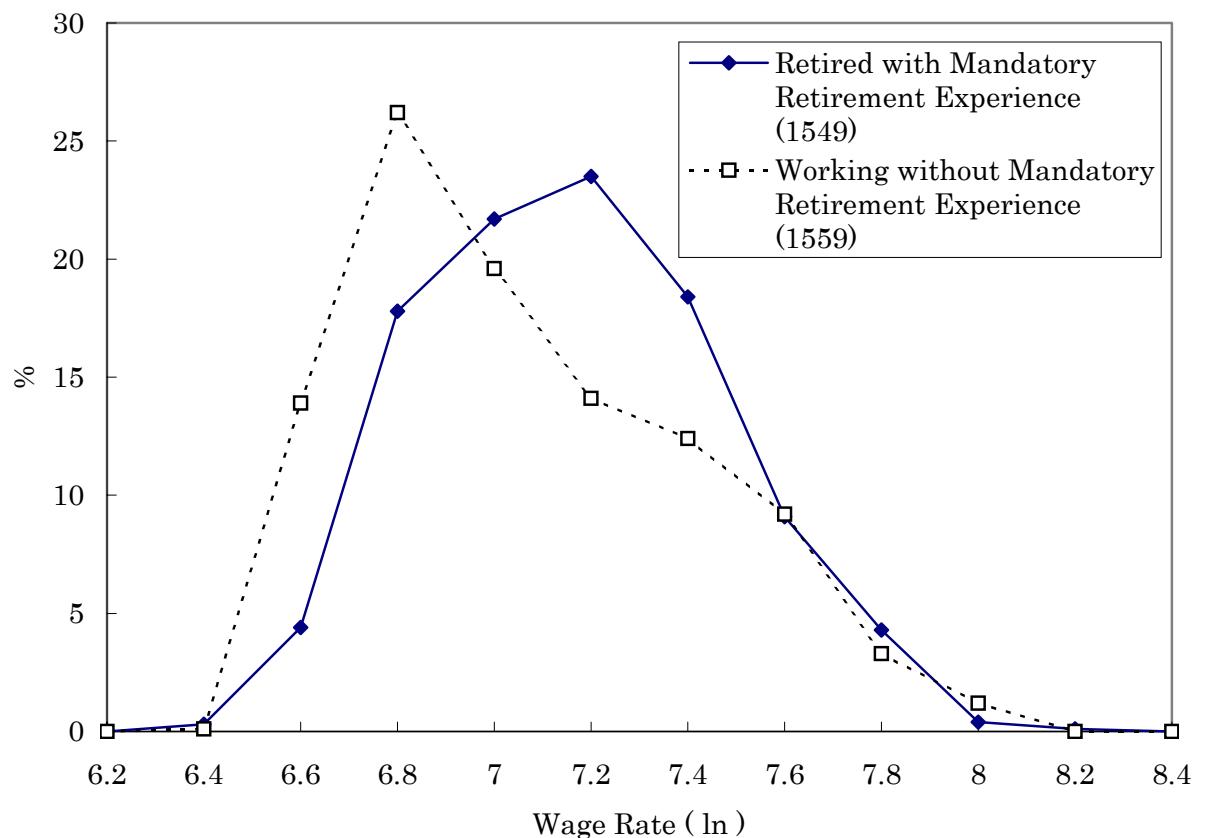
AGE Age, HEALTH Health problem, FAMILY Family size, NOMOGAGE No mortgage, METRO Metropolitan resident, MANDRET Mandatory retirement, PENSION Public pension (0000 yen), REGULAR55 Regular worker at age 55, GOV55 Employed by government at age 55, LARGE55 Employed by large firm at age 55, SMALL55 Employed by small firm at age 55, MGR55 Managerial occupation at age 55, PRO55 Professional occupation at age 55, OTHER55 Other white collar occupation at age 55, SERVE55 Service occupation at age 55, SAMEJOB55 Same occupation at age 55, SAMEFIRM55 Employed by same firm at age 55

***, **, * Statistically significant at the respective levels of 1%, 5%, and 10%.

Source: Seike and Yamada (1998 b)

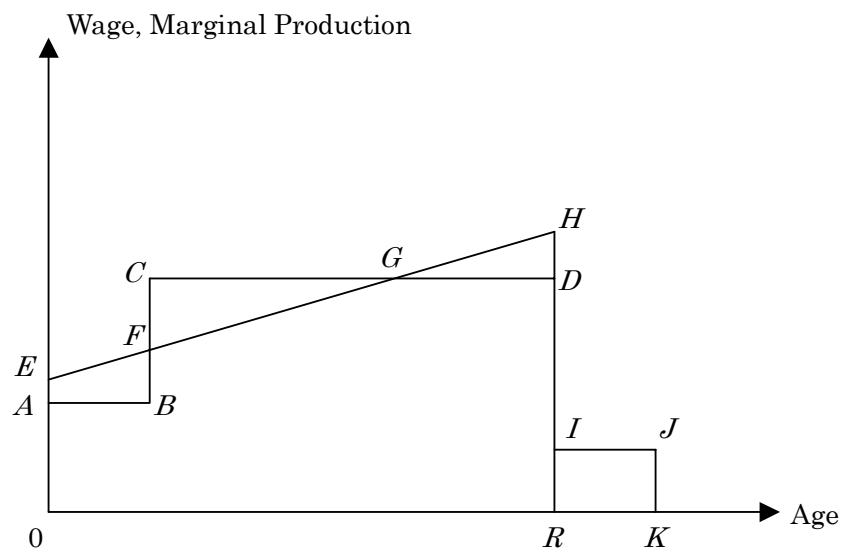
Figure 3 Wage Rate for Older Workers with and without Mandatory Retirement

Experience (Men Aged 60-69)



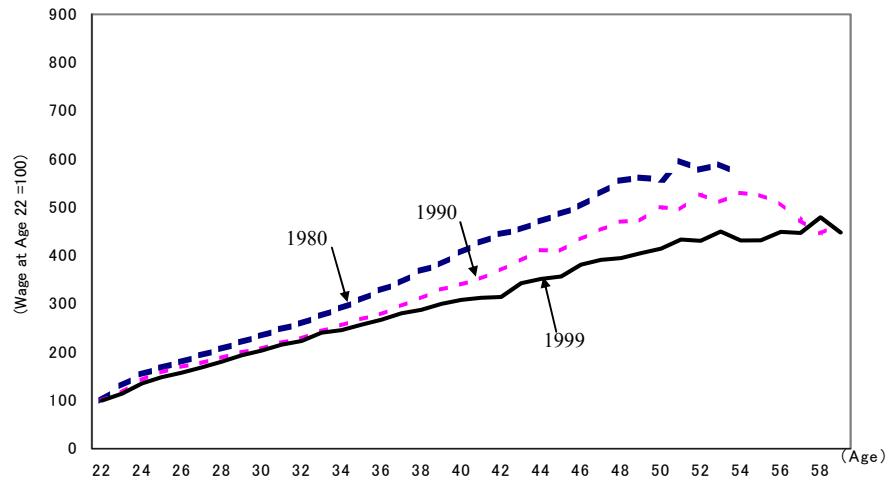
Source: Seike and Yamada (1998 b)

Figure 4 Relationship between Productivity and Wage



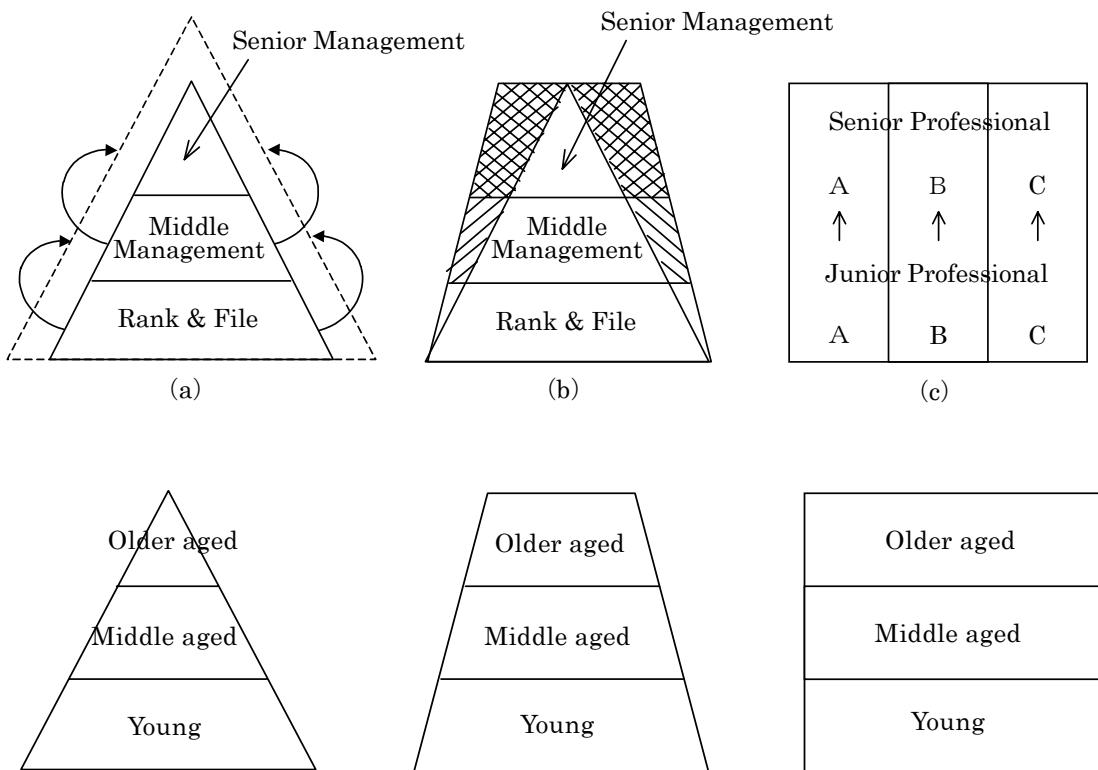
Source: Lazear (1979). We modified his figure.

Figure 5 Age-Wage Profile of Male Standard Workers (with College Degree)



Source: Ministry of Labor, *White Paper on Labor*, 2000.

Figure 6 Shift in Personnel Structure



Source: Seike, A. "Utilization of Older Workers," in Hori, K. ed., *New Management for the 21st Century (in Japanese)*, Tokyo: Sogohorei, 1993.